IN THE CLAIMS

The following is a complete listing of claims which replaces all previous versions and listings of the claims.

1. (previously presented) A method for operating a computing device, comprising:

tabulating resources of the computing device into one or more resource tables;

allocating resources from one or more of the resource tables to a plurality of resource sets prior to loading a desired O/S layer for the computing device; and

loading a desired operating system on each set of the plurality of resource sets at the desired O/S layer.

2. (original) The method of claim 1, wherein allocating resources comprises organizing the resources in a ROM-based environment.

3. (original) The method of claim 2, wherein organizing the resources in the ROM-based environment comprises gathering device data from a BIOS module.

4. (original) The method of claim 1, wherein allocating resources comprises dividing the resources in an initialization phase of the computing device.

5. (original) The method of claim 4, wherein allocating resources comprises sharing at least a portion of the resources.

6. (original) The method of claim 1, wherein allocating resources comprises identifying and initializing at least a portion of the resources.

7. (original) The method of claim 1, wherein allocating comprises manually selecting desired allocations of the resources via a user interface.

8. (original)   The method of claim 1, comprising running multiple desired operating systems at the desired O/S layer on the computing device.

9. (previously presented) A method for simultaneously supporting a plurality of independent operating systems on a computing device, comprising:

cataloguing resources of the computing devices prior to O/S booting for the
computing device;

dividing the resources into multiple subsets prior to O/S booting wherein dividing
the resources comprises partitioning the resources with an extensible
firmware interface; and

loading the plurality of independent operating systems, at least one O/S being
loaded on each resource set of the multiple subsets.

10. (original) The method of claim 9, wherein the plurality of independent operating systems provide independent platforms for loading and running application software.

11. (original)   The method of claim 10, wherein cataloguing, dividing and loading are performed in an initialization phase of the computing device.

12. (original)   The method of claim 9, wherein dividing the resources comprises allocating desired portions of hardware and system services to each of the multiple subsets.

13. (original) The method of claim 12, wherein allocating desired portions of hardware and system services comprises sharing the system services between the multiple subsets and the independent operating systems loaded thereon.

14. (previously presented) A system for booting a computing device, comprising:
an extensible firmware interface comprising:

a resource tabulator module configured to organize data on

system resources for the computing device; and

a resource divider module configured to create multiple resource

sets for the computing device; and

an operating system loader module configured to load a desired operating

system on each of the multiple resource sets.

15. (original)   The system of claim 14, wherein the resource tabulator module and the resource divider module are disposed in a pre-boot environment.

16. (original)   The system of claim 15, wherein the resource tabulator module and the resource divider module are disposed in ROM.

17. (original)   The system of claim 14, wherein the pre-boot environment comprises hardware detection modules for the system resources.

18. (original)   The system of claim 14, wherein the pre-boot environment comprises hardware driver modules for the system resources.

19. (original)   The system of claim 14, wherein the resource divider module comprises a user interface.

20. (original)   The system of claim 14, wherein the resource divider module comprises a hardware partitioning module.

21. (previously presented)   A system comprising:

a resource tabulator module configured to obtain resource tables associated

with a computing device;

a resource divider module configured to create multiple resource sets from the

resource tables;

an operating system loader module configured to load a desired operating system on each of the multiple resource sets; and

an interrupt controller module configured to detect and deliver interrupts to at least one of the operating systems through a peripheral components interconnect ("PCI") bus.

22. (previously presented)   The system of claim 21, comprising redirection registers, wherein the interrupt controller module is configured to communicate through the PCI bus via the redirection registers.

23. (previously presented)   The system of claim 22, wherein the redirection registers comprise extended identifiers for identifying a processor within one of the resource sets.

24. (previously presented)   The system of claim 21, wherein the interrupt controller module comprises a legacy system.